

Interview Task -Samuel Palacio

Setup

Project Creation: Unity 2021.3.2f1 URP 2D

Character Movement

The Unity Input System was used for player input handling. Movement was achieved using the Rigidbody component

Input System

Input Handler: An Input Handler was created to read player input and emit events for other classes to respond.

Character Animation

Sprite Animation: While initially considering a sprite sheet Animator, a material-based animation using offset offered me better results.

Material Animation: .The character has a base texture and placeholders for customizable elements like heads, torsos, legs, and feet.

Store and Inventory

Store Implementation: The store design is done using interfaces thinking about future expansion with different products.

Product Data: Product information was stored in ScriptableObject for easy access from any component. Each product contained essential details for inventory equipping and unequipping like sprite atlas, name, id....

The Singleton, Observer, and other design patterns were applied.

Inventory and Item Management

Inventory Structure: Independent classes managed the inventory, connected with product Scriptable Objects.

The Singleton, Observer, and other design patterns were applied.

Resource Sources

Asset Store and itch.io: Assets and resources were sourced from Asset Store and itch.io.

General and personal assessment

In summary, Input systems, character animations, a store, and an inventory were implemented. Despite time constraints, I tried to use design patterns to be more organized and have better code organization and efficiency. While room for improvement exists, the overall outcome is satisfactory to me, I believe this was a great experience.